

Claims

What is claimed is:

1. A method for tracing an instrumented application, comprising:
 - loading the instrumented application into a kernel level to obtain a corresponding instrumented process;
 - registering a helper action with a tracing framework;
 - tracing the instrumented process using the tracing framework, wherein tracing comprises triggering a probe in the instrumented process;
 - determining whether the helper action is associated with the probe; and
 - performing the helper action if the helper action is associated with the probe.
2. The method of claim 1, further comprising:
 - obtaining a helper action associated with the instrumented application.
3. The method of claim 2, further comprising:
 - linking the helper action to an initialization file associated with the instrumented application.
4. The method of claim 3, wherein loading the instrumented application comprises:
 - triggering a hook in the initialization file to load the helper action into the kernel-level.
5. The method of claim 4, wherein the helper action is stored in a process helper data structure.
6. The method of claim 5, wherein the process helper data structure is associated with the instrumented process.
7. The method of claim 1, further comprising:

generating a helper action associated with the instrumented application.

8. The method of claim 5, further comprising:
linking the helper action to an initialization file associated with the instrumented application.
9. The method of claim 6, wherein loading the instrumented application comprises:
triggering a hook in the initialization file to load the helper action into the kernel-level.
10. The method of claim 9, wherein the helper action is stored in a process helper data structure.
11. The method of claim 10, wherein the process helper data structure is associated with the instrumented process.
12. The method of claim 1, wherein performing the action associated with the probe further comprises:
performing a probe action associated with the probe.
13. A system, comprising:
an instrumented application comprises a probe, wherein the probe is associated with an action;
a helper action associated with the instrumented application; and
a tracing framework configured to trace an instrumented process corresponding to the instrumented application and to execute the helper action if the action is associated with the helper action.
14. The system of claim 13, wherein the helper action is generated using implementation specific details associated with the instrumented application.

15. The system of claim 13, wherein the implementation specific details comprise at least one selected from the group consisting of an instrumented application data structure and an instrumented application algorithm.
16. The system of claim 15, wherein the instrumented application data structure comprises an application stack.
17. The system of claim 16, wherein the application stack comprises at least one selected from the group consisting of an interpreter stack and a virtual machine stack.
18. The system of claim 13, wherein the action is a generic tracing action.
19. The system of claim 18, wherein only the helper action is executed if the helper action and the generic tracing action are associated with the probe.
20. The system of claim 18, wherein the helper action and the generic tracing action are executed if the helper action and the generic tracing action are associated with the probe.
21. The system of claim 13, wherein the helper action is stored in a process helper data structure.
22. The system of claim 21, wherein the process helper data structure is associated with instrumented process.
23. A network system having a plurality of nodes, comprising:
 - an instrumented application comprising a probe, wherein the probe is associated with an action;
 - a helper action associated with the instrumented application; and
 - a tracing framework configured to trace an instrumented process corresponding to the instrumented application and to execute the helper action if the action is associated with the helper action;

wherein the instrumented application executes on any one of the plurality of nodes,

wherein the helper action is located on any one of the plurality of nodes, and

wherein the tracing framework executes on any one of the plurality of nodes.